

THE MYSORE GAZETTE.

405

Published by Authority.

BANGALORE, SATURDAY, SEPTEMBER 22, 1883.

PART IV.

Official Papers.

ADMINISTRATION REPORT ON THE MYSORE STATE RAILWAY FOR 1882—83, BY THE CONSULTING ENGINEER TO THE GOVERNMENT OF MYSORE.

The Preliminary Administration Report on the Railways in India for 1882—83, prepared by the Director General of Railways, was received in Office on 27th June 1883, and it is proposed to adopt the figures therein given for different Railways of the metre gauge and compare them with those for the Bangalore-Mysore Railway.

By a reference to Table A it will be seen that under Guaranteed Companies, Assisted Companies, Imperial, Provincial and Native States 4,591 miles Metre Gauge Railway have been sanctioned; of which 3,083½ miles were open to traffic on 31st March 1883, leaving 1,867½ miles to be finished. Of these totals, Mysore had 86 miles of line open and 43 miles under construction.

The column of Remarks, Table A, gives the nature of the different lines and the conditions under which they were and are being constructed. It may be noted that the South Indian Railway has been altered from broad gauge to metre, that the Nagpur-Chattisgarh line will be altered from metre gauge to broad, and that the Assam Light Railway is being laid on a high road with 30 lbs. rails under a Government guarantee of 5 per cent for 20 years on a maximum capital of 16 lakhs of rupees.

During the passed 10 years from the time when the first metre gauge line was opened in India to the present moment, 3,083 miles of metre gauge railway have been completed for traffic, and under the policy lately recommended to the Secretary of State, progress in the future will be much more rapid than in the past.

A very small amount of Indian Railway capital is held by Natives.

Lines under Construction.—The plans and estimates for the Bangalore-Tumkur line, 43 miles, were submitted for the approval of the Government of India, and on 1st May 1882, a public loan of 20 lakhs bearing interest at 5 per cent and redeemable in 25 years was obtained. The work between Bangalore and Tumkur was given in contract at 3½ per cent below Government rates to Messrs. Arunachalam, Papanna and commenced on 11th September 1882 in the presence of His Highness the Maharaja of Mysore. The permanent-way material was ordered from England and the greater part of it arrived in Bangalore before 31st March 1883.

The expenditure on Bangalore-Tumkur line under construction from October 1882 to end of March 1883 is as under:—

	Rs.	Rs.
Preliminary Expenses ..	26,144	
Land ..	3,000	
Earth work ..	1,06,734	
Bridges ..	26,794	
Level crossings ..	123	
Ballast ..	4,284	
Stations and Buildings ..	49,363	
A. Total Work in India		2,16,442
Permanent-way material ..	5,94,762	
Plant ..	5,128	
Rolling Stock ..	60,000	
B. Material from England...		6,59,890
Total of A and B...		8,76,332
Establishment ..		18,003
Total Expenditure...		8,94,335

which gives a charge for establishment of 3.31 per cent on the actual construction in India or a charge of 2.05 per cent on the cost of labor and materials together, as against 8.44 per cent on Bangalore-Mysore line.

Lines under survey.—The plans and estimates of the Tumkur-Tiptur extension, 44 miles, were submitted to the Government of India for approval. The plans of the extension from Mysore to Nanjangud, 15 miles, were in course of preparation.

Light Railways.—The proposal of Mr. South for introducing light railways into Mysore is under consideration.

Lines open to Traffic.—Bangalore-Mysore 85.75 miles.

On pages 38—39 of the Director General of Railways Administration Report the capital expenditure on the Bangalore-Mysore line is shown at Rs. 44,59,270 appropriated under different heads of service up to 31st December 1882 with the large sum of Rs. 7,48,754 standing in suspense. The actuals on 31st May 1883 are now obtainable and are here inserted.

BANGALORE-MYSORE RAILWAY.

Statement showing Expenditure as it stood on 31st December 1882 and 31st May 1883.

Heads of Service.	Expenditure on—		
	31st December 1882.	31st May 1883.	
Preliminary Expenses ...	93,939	93,939	
Land ...	60,186	38,327	
Construction of line ...	9,91,360	10,11,276	
Ballast and Permanent-way ...	15,14,298	14,97,353	
Stations and Buildings ...	3,75,060	3,54,990	
Plant ...	73,211	61,563	
Rolling Stock ...	2,49,566	6,05,459	
Establishment ...	3,61,423	3,62,017	
Total Final Heads.....	37,19,043	40,24,924	Rs. 46,938 per mile.
Suspense Account.....	7,48,754	2,73,883	
Total.....	44,67,797	42,98,807	
Deduct Receipts on Capital Account.....	8,527	8,593	
Total for 85.75 miles.....	44,59,270	42,90,214	
Total for 1 mile.....	52,003	50,031	

In all comparisons that may be made, in this report the actuals on 31st May 1883 amounting to Rs. 42,90,214 will be adopted.

On page 34 of Director General of Railways' Administration Report a statement is given showing the cost of each Railway on 31st December 1882 and the average cost per mile. The figures in column IV, page 34, give the "Average cost per mile" (exclusive of Steam-boat service and suspense), and the same figures are repeated on page 53 wherein it is stated that they represent "Total Capital Outlay per mile" open excluding steamer service and suspense accounts".

The statement for metre gauge railways is as under :—

Statement showing Total Cost of each Metre Gauge Railway on 31st December 1882 and the average cost per mile.

Railway.	Length of line open on 31st December 1882.	Total Capital Outlay to 31st December 1882 (exclusive of Steam Boat Service and Suspense.)	Average Cost per mile open (exclusive of Steam Boat Service and Suspense.)	Total Capital Outlay to 31st December 1882.
	Miles.	Rs.	Rs.	
1. South Indian	655	4,30,21,249	65,681	4,53,57,677
2. Rajputana-Malwa	1,115.55	8,74,13,893	78,359	9,21,17,606
3. Northern Bengal	243	2,01,06,785	82,744	2,09,26,406
4. Tirhoot	82	61,09,775	74,509	78,08,236
5. Muttra-Bathras	29	10,47,748	36,129	10,82,927
6. Muttra-Achnera	22.75	6,26,164	27,524	6,27,781
7. Cawnpore-Furruckabad	86.50	31,31,013	36,197	32,08,969
8. Nagpur-Chattisgarh	149	87,95,174	59,028	90,64,388
9. Rangoon and Irrawady	161	1,26,82,705	78,775	1,33,09,835
10. Bhavnagar-Gondal	193	83,60,328	43,318	86,75,711
Average cost of one mile open, Nos. 1 to 10.	2,736.80	19,12,94,834	69,897	20,21,79,536
11. Mysore	85.75	40,24,924	...	42,90,214
Average cost of one mile open, Mysore	...	...	46,938	50,031

which gives a result in favor of Mysore of Rs. 22,959 per mile open if suspense is excluded and of Rs. 23,843 per mile open if suspense is included.

It is now time to turn to details.

For comparison Table B has been prepared from the classified expenditure including suspense appropriated on some of the lines up to 31st December 1882. The South Indian Railway (Rs. 69,248 per mile) has to be omitted for want of detail, and the two short lines from Muttra are left out as the greater portion of their rails are laid upon the metalled high way and weigh only 30 lbs. per yard.

It is necessary before going into the detail of Table B to point out that the totals given by the Director General of Railways have been reduced in the following instances :—

Railway.	From.	To.
1. Rajputana-Malwa ..	9,21,17,606	7,94,22,831
4. Tirhoot ..	78,08,236	61,09,590
6. Cawnpore-Furruckabad ..	32,08,969	32,08,712

and the result of these reductions is that the average cost per mile of the metre gauge railways Nos. 1 to 7, with which Bangalore-Mysore Railway No. 8 is to be compared, has been reduced from Rs. 76,408 per mile to Rs. 69,317.

The result of Table B is as under :—

Classified Expenditure to 31st December 1882.

Heads of Service.				Average Cost of 1 mile on Rail- ways Nos. 1 to 7.	Cost of 1 mile Mysore No. 8.	Percentage to Total Mysore.
				Rs.	Rs.	Per Cent
Preliminary Expenses	...	...	...	1,169	1,096	2.19
Land	...	...	...	983	447	0.89
Construction of Line	...	...	...	18,201	11,793	23.57
Ballast and Permanent-way	...	...	...	20,931	17,462	34.91
Stations and Buildings	...	...	...	8,029	4,140	8.27
Steam Ferries	...	...	...	323	...	...
Plant	...	...	...	1,808	717	1.44
Rolling Stock	...	...	...	9,595	7,060	14.11
Establishment	...	...	...	5,304	4,222	8.44
Suspense Accounts	...	...	...	3,036	3,194	6.38
				69,379	50,131	100.20
Receipts on Capital Account deducted...				62	100	0.20
Total.....				69,317	50,031	100

So that Mysore cost Rs. 19,286 less per mile than the average of 7 other lines, and this saving is obtained by a less cost under every head of service except suspense and then only does it exceed the average by Rs. 158 per mile.

But the foregoing deals with the average cost of construction on 7 other Railways, and it is now proposed to compare the cost per mile of the Bangalore-Mysore line with the actual cost per mile on each of the Railways already enumerated irrespective of their length.

Table C has therefore been prepared from Table B and it shows under every head of service the outlay per mile on 8 metre gauge railways including Mysore.

The details of construction of the 8 lines under review is given below :—

Railway.			Details of Construction.
Rajputana-Malwa	...	...	Single track. Rails 36 and 40 lbs. per yard laid on transverse deodar and creosoted pine sleepers. On the Rajputana line bridging is heavy. On the Holkar Railway work generally is heavy, and on Sindia-Neemuch the works with the exception of bridging are light.
Northern Bengal	...	...	Single track. Rails 40 lbs. per yard and sleepers of creosoted pine, sal, red gum, and wrought and cast iron have been used. The bridging is heavy on the lower section.
Rangoon and Irrawady	...	...	Single track. Rails 40 lbs. per yard. Bridging is heavy; other works are light; country flat and low.

Railway.	Details of Construction.
Tirhoot	Rails 40 lbs. per yard on transverse sleepers chiefly deodar.
Nagpúr-Chattisgarh	Rails 40 lbs. per yard laid on creosoted pine, sal and teak wood sleepers.
Cawnpore-Furruckabad	Single track. Rails 40 lbs. per yard. Light work.
Bhavnagar-Gondal	Rails 40 lbs. per yard on half round sleepers. Land free.
Mysore	Rails 41½ lbs. per yard laid on creosoted pine and teak sleepers. Bridging heavy. Twenty-two 30' arches, forty-four 27½ feet arches and two 25 feet arches over the Cauvery at Seringapatam.

From the above it will be seen that Mysore uses a rail about 3 per cent heavier than the other lines.

The most expensive line is the Northern Bengal with its heavy bridging at Rs. 86,117 per mile and the cheapest is the Cawnpore-Furruckabad with its light works at Rs. 37,094 per mile.

Classified Expenditure per mile.—Table C.

Preliminary Expenses.—(Table C, Column A).

Mysore stands sixth on the list and the price per mile, Rs. 1,096, may be attributed to the surveys being so often repeated.

Land.—(Table C, Column B).—Bhavnagar-Gondal has paid nothing, and the lowest price per mile is Rs. 256 on Nagpúr and Chattisgarh. Mysore comes next with Rs. 447. The cost of Mysore Railway land can still further be reduced as many plots can be resold to the ryots especially in the paddy flats near Maddur, Attihalla and throughout the Cauvery valley.

Construction of Line.—(Table C, Column C).—Mysore, notwithstanding its large bridges, stands second with Rs. 11,793; the first being Cawnpore-Furruckabad costing Rs. 5,144.

Ballast and Permanent-way.—(Table C, Column D).—Mysore with its heavier rail and stone ballast stands fourth on the list with Rs. 17,462 expended per mile.

Stations and Buildings.—(Table C, Column E).—Mysore has spent Rs. 4,140 per mile and stands third. Probably as traffic develops, expenditure under this head may be increased by Rs. 1,000 per mile.

Plant.—(Table C, Column G).—The stock on Mysore line consists of—

Sub-heads.	Rupees.	Description.
Engineering Plant	34,640	Consists of Tools, Machinery, Instruments and Camp equipage.
Locomotive Plant	8,182	Tools and Machinery used for Locomotive purposes.
Carriage and Wagon Plant	3,250	Do for Carriage and Wagon.
Station and Office Furniture	15,491	Furniture in Offices and Stations.

410

The mileage rate of Rs. 717 will be reduced as soon as Tumkur line is opened.

Rolling Stock.—(Table C, Column II).—Mysore has spent Rs. 7,000 per mile and the amount of stock is here given:—

Details of Rolling Stock.

No.	Particulars.	Rupees.	Remarks.
1	Engine No. 15	11,665	} Sold to Southern Maharatta: figures show balance charged to Mysore on the Sale.
	Engine No. 19	1,089	
	" No. 20	2,053	
4	A Class Nos. 33 to 36...	57,583	
7	N Class	1,34,241	
12		2,06,631	
<i>Carriages.</i>			
10	1st Class with end doors	35,100	} Convertible into Ambu- lance Carriages. 32 fitted with Brakes.
2	" " side "	5,752	
2	2nd Class with end doors	6,241	
4	" " side "	8,330	
6	3rd Class with end doors	13,638	
47	" " side "	98,007	
71		1,67,068	
<i>Wagons.</i>			
2	Double Horse Boxes	4,638	} 23 Fitted to carry passen- gers during fair time.
4	Carriage Trucks	4,190	
10	Timber Trucks	10,915	
78	Lowsided Wagons	76,447	
20	Hightsided "	22,730	
50	Iron Covered Goods Wagons	67,841	
164		1,86,761	
<i>Brakes.</i>			
4	Brake Vans (new)	8,096	} 3rd Class converted.
1	Do (old)	2,924	
2	Brake Vans	5,274	
7		16,294	
<i>Travelling Cranes.</i>			
6	5 Ton Travelling Cranes	28,421	
2	2 Ton " "	284	
8		28,705	
Grand Total.....		6,05,459	

Table J has been prepared showing in detail the number of engines and vehicles on other lines. It gives the following results:—

Quantity of Rolling Stock for 85.75 miles.

Class of Stock.	Average of 8 Lines.	Mysore.	Remarks.
Engines ...	17.5	12	
First Class Carriages ...	5.9	12	
2nd " " ...	4.6	6	
3rd or Intermediate ...	2.7	*53	*32 fitted with brakes.
4th or Lowest Class ...	34.7		
Composite ...	2.7		
Miscellaneous Coaching ...	7.5		
Goods Vehicles ...	311	†161	†23 adapted for carrying passengers and 22 additional ordered under Tumkur indent.
Brake Vans ...	14	7	

As regards engines, Mysore with 1 to every 7 miles has sufficient for the present. In coaching vehicles Mysore has 71 against an average of 58, and further it can convert in a few minutes 25 of its covered goods wagons into passenger vehicles for use during fair time and festivals. Goods vehicles can be increased in number as traffic develops and brakevans can be provided to any extent on demand from the stock of 3rd class carriages fitted with brakes.

It is worthy of special remark that Mysore both in its Railway Workshops and by private firms has already commenced to construct vehicle stock in large numbers for other Railways in India—a very fair proof in itself that the material used is good, the workmanship sound and the price moderate.

Establishment.—(Table C, Column J).—Mysore has spent Rs. 4,222 per mile or 8.44 per cent of its total outlay. Mysore might have done better, but it made a mistake in employing a large superior establishment to supervise works piecemeal under limited grants.

There is nothing more fatal to economy in the construction of public works generally and of railways in particular. Taking the Mysore Railway and the experience gained thereon and applying it to the case of the Tumkur construction, the saving on that extension in establishment charges alone will amount to about Rs. 2,796 per mile or a sum of Rs. 1,20,228 on the 43 miles.

The mileage charge under this head on the Mysore Railway system will be reduced so soon as the Tumkur line is open to traffic.

Suspense.—(Table C, Column N).—The amount standing to debit of Mysore is Rs. 2,73,883 or a mileage charge of Rs. 3,194 per mile. At this price Mysore stands sixth on the list of 8.

A greater portion (say 2 lakhs) of this amount will eventually be paid for by Revenue and the debit to Capital will not exceed Rs. 500 per mile or one-sixth of that now charged.

412

The suspense account as it stood on the 31st May 1883 is as under:—

Details of Suspense Account on 31st May 1883.

Sub-heads.	Debtor, amount.	Creditor, Amount.	Remarks.
Purchases	...	8,794	Stores received but not yet paid for.
Sales	3,411	...	Money not yet received. Suspense will receive credit ultimately.
			<i>Capital—</i>
			Workshop Machinery Rs. 23,000
			<i>Revenue—</i>
			Tools ... 6,500
			Engineer's Plant 7,000
			Carriage fittings 15,400
			Engine „ 1,500
Stores... ..	1,44,666	...	Station Materials 18,000
			Permanent-Way 10,000
			Fuel ... 25,000
			Pillars, Trolleys, &c. 4,000
			87,400
			<i>Capital and Revenue—</i>
			Miscellaneous Stores Rs. 34,266
			<i>Revenue—</i>
			Engine Duplicates 36,000
London Stores	99,035	...	Engine Wheel Lathe 8,000
			Girders 52,000
			Miscellaneous Stores 3,035
			<i>Tramway—</i>
			Trucks 5,000
Workshop Manufacture	19,820	...	Workshop Machinery 4,000
			Engine Duplicates 4,500
			Engine and Vehicle Repairs ... 3,500
Manufacture	...	77	Miscellaneous ... 2,820
Miscellaneous Advances	15,822	...	About 12,000 will be charged to Stores.
	2,82,754	8,871	
Net.....	2,73,883		

Total Cost including Suspense.—(Table C, Column O).—The cost of the Bangalore-Mysore Railway is Rs. 50,031 per mile, and this rate will be reduced as suspense is absorbed by revenue. The rolling stock may have to be increased, open bridges covered in, goods sheds, stations and other accommodation may have to be added, yet the ultimate capital outlay of the present line in full working order should not

exceed Rs. 50,000 per mile, and at this price, considering the character of the country through which the line has been carried, Mysore cannot be accused of extravagance in its first attempt at railway construction.

One point however requires notice. The nature of the Mysore line with its sharp curves and steep grades will always entail heavy cost in working and in maintenance. The time may therefore come when with a public demanding a higher rate of speed and with a Government desiring a higher rate of profit, many miles will have to be realigned and reconstructed at an increased capital expenditure.

Retrospect.—On 1st April 1870 the Government of India in replying to Mr. Bowring's recommendations directed that surveys for railways in Mysore shall be commenced.

A Railway Report prepared by Captain Lindsay, R. E., with plans and sections of various routes on which Messrs. Henderson, Stace, Fox, Bernardo and Target had been engaged, was ready by November 1870 and the same was submitted to the Government of India in December 1870 by Major Sankey, R. E., at a time when Colonel Meade was Chief Commissioner in Mysore.

A revised estimate for the Bangalore-Mysore Railway was prepared and submitted to the Government of India on 22nd December 1871.

The proposal regarding the railway was held in abeyance in April 1872 till funds were available, and Captain Lindsay was transferred to Bengal.

The railway project is again reopened in August 1873 and the original report and drawings sent by Mysore to India are received back again in January 1875.

During 1876—77 there is an estimated deficit of 32 lakhs rupees and the Province is reduced by famine. Distress prevails, and on 8th August 1877 the Government of India sanctioned the commencement of the railway embankment for the broad gauge between the Madras Terminus and the Pettah as a famine relief work, Mr. Henderson being the Executive Engineer in charge.

On 20th September 1877 it was ascertained that irrigation and road works could not employ more than 22,000 men while labor for double that number was required. The Government of India then sanctioned the earthwork and collection of ballast on the lengths between Bangalore and Channapatna and between Mysore and Seringapatam. In the event of further relief work being required, the alignment of the railway between Channapatna and Seringapatam was again taken into consideration.

On 4th February 1878 the earthwork for 14 miles is far advanced and the line is located and laid out for over 40 miles when a question arose as to whether the railway should be on the metre gauge or on the broad gauge with rails of 45 lbs. to a yard. As it was vain to expect for many years to come that Mysore revenue could bear the cost, a loan was asked for from the Government of India to be devoted exclusively to the construction of this railway. Very shortly after this Mr. Gordon succeeded Mr. Saunders as Chief Commissioner.

On 29th March 1878 the metre gauge was decided on, a desire for strict economy affected the character of the work and the Mysore Railway became committed to grades as steep as 1 in 70 and curves as sharp as 660 feet radius.

On 15th June 1878 the Government of India approved of the direct line between Bangalore and Mysore being adopted and at the same time sanction was given for the construction of the bridges between Madras Terminus and the Pettah. On 3rd February 1879 provisional sanction was accorded to the estimates for work between Bangalore Pettah and Channapatna and Mr. Henderson was appointed Engineer-in-

Chief. The estimates for the remaining portion between Channapatna and Mysore were submitted in March and received sanction in June 1879.

Mr. Henderson was forced through failing health to leave Mysore and Major LeMessurier, R. E., succeeded him in November 1879.

The broad gauge portion between Madras Terminus and the Pettah was handed over to the Madras Railway on 1st October 1880, and the Mysore Railway was opened for passenger traffic on the following dates:—

Bangalore to Channapatna		1st February 1881.
Do to Mandya		20th March 1881.
Do to Mysore		25th February 1882.

and for goods traffic on 1st June 1882.

The Rendition of Mysore to HIS HIGHNESS THE MAHARAJA CHAMARAJENDRA WODAYAR was accomplished on 25th March 1881. The Secretary MR. RANGACHARLU, C. I. E., being appointed Dewan, SIR JAMES GORDON, K. C. S. I., Chief Commissioner, remaining as Resident in Mysore.

REVENUE.

The first public train with passengers ran through from Bangalore to Mysore on 25th February 1882, and trains with local goods commenced to run on 1st June 1882.

The Administration Report is of interest not merely because it deals with the Capital outlay involved in constructing 85½ miles metro gauge railway to join Bangalore with the capital town of the Province, but also because it treats of the Revenue earned in working the said section during the first year of its infancy.

Notwithstanding the difficulty of organizing the different departments of Revenue servants more or less unacquainted with railway work, a want of rolling stock, and the fact that establishment charges on so short a line must be comparatively heavy, the net receipts amounted to Rs. 1,03,945 or a return of 2·42 per cent on the Capital expenditure of Rs. 42,90,214.

The general results of working are given on Table E, and the following items are eliminated therefrom:—

Progressive Number.	Items.	Average on 8 Railways.	Mysore.
1	Miles open	85·75	85·75
8	Percentage of working expenses to gross receipts	56·14	61·11
10	Interest on capital	4·57	2·42
14	Total train miles	228,651	101,479
17	Gross earnings per train mile	Rs. 2·93	2·84
18	Working expenses do	1·64	1·82
19	Net earnings do	1·28	1·02
20	Number of passengers in a passenger train	203·78	209·68
21	Number of tons in a goods train	52·42	25·90
22	Vehicles in passenger trains	11·29	10·83
23	Do in goods trains	22·70	11·03
27	Cost of hauling a passenger one mile	1·31	1·53
28	Do one ton goods	6·78	12·00
29	Sum received for carrying passenger one mile	2·53	3·05
30	Do one ton of goods	9·98	13·97

which roughly indicate that had the Mysore worked for a full year and up to an average standard of lines that have been working for sometime, it should have run quite double the number of train-miles. The passenger traffic approached $\frac{3}{4}$ ths of the average on 8 other lines, but the goods traffic, owing to the paucity of stock and the time necessary for its development, was about $\frac{1}{4}$ th of what may be expected. There is also evidence to show that when traffic increases, the fares both for passengers and goods will admit of reduction.

Passenger Traffic.—(Table F).—The number of passengers carried was 319,025 for Rs. 1,92,555. The percentages were—

			Number.	Rs.
1st Class	..	..	1.21	4.60
2nd Class	..	..	2.40	3.46
3rd Class	..	..	96.39	83.21
Miscellaneous	..	..	..	8.73

While as regards fares Mysore compares well with the average charges on other lines :—

Fares per mile.				Average of 8.	Mysore.
1st Class	...	...	...	Pies. 15.7	Pies. 12
2nd Class	...	...	...	7.55	6
Intermediate	...	...	...	3.83	...
Lowest Class	...	...	...	2.64	3

Through booking with all stations, Madras Railway, was introduced on 15th December 1882.

The distribution of Mysore coaching traffic in numbers and rupees, compared with the average of 8 other metre gauge lines is as under :—

Coaching.			Average of 8 for 85.75 miles.		Mysore 85.75 miles.	
			Number.	Rs.	Number.	Rs.
1st Class	...	...	1,283	8,514	3,853	8,850
2nd Class	...	...	4,788	8,926	7,644	6,670
3rd Intermediate	...	...	2,870	3,280	...	...
4th or Lowest Class	...	...	425,877	2,24,890	3,07,523	1,60,232
Miscellaneous	...	...	...	20,770	...	16,803
Totals.....			434,818	2,66,380	3,19,025	1,92,555

which shows that the number of passengers in each of the classes was influenced by the amount of the fare charged.

During the year under review there was no object in reducing the Mysore 3rd class fare, for stock was not available to carry increased numbers.

Goods Traffic.—(Table G.)—The amount carried was small, viz., 22,107 tons for Rs. 92,818. The percentages were :—

	Tons.	Rs.
General merchandise	56.37	58.80
Military stores... ..	0.03	0.07
Railway material	28.89	36.62
Coal for revenue	0.12	0.09
Revenue stores... ..	14.47	3.39
Live stock	0.12	0.49
Miscellaneous	...	0.54

The rates for merchandise are given on Table H and do not seem to be higher than the average of those charged on other lines.

The quantities of principal articles carried and the receipts therefrom are given on Table J. The most important being—

	Tons.	Rs.
Railway material	6,387	33,994
Grains and pulse	4,466	19,420
Revenue stores... ..	3,152	2,541
Salt	1,189	4,306
Wood	1,139	2,772
Coffee	1,136	6,070
Seeds	963	3,673
Cotton manufactured	574	3,632

The distribution of Mysore goods traffic in tons and rupees compared with the average of other lines is as under :—

Goods.	Average of 8 lines 85.75 miles.		Mysore 85.75 miles.	
	Tons.	Rs.	Tons.	Rs.
General merchandise	53,005	3,48,273	12,462	54,567
Military stores	227	2,388	7	67
Railway material for construction	13,557	12,226	6,387	33,994
Coal for public and construction	1,049	2,098	...	...
Coal for Revenues	2,644	8,092	27	82
Revenue stores other than coal... ..	16,693	6,974	3,199	3,150
Live stock	52	735	25	459
Miscellaneous	...	1,236	...	499
Totals.....	87,927	3,82,022	22,107	92,818

as nearly as possible $\frac{1}{4}$ th both in goods and money of the average earned on other lines.

The unit mileages of passengers and of goods is given on Table K.

Total Receipts and Expenses.—(Table L).—

The gross receipts were Rs. 2,88,390 or Rs. 2·84 per train-mile.

The working expenses Rs. 1,84,895 or Rs. 1·82 per train-mile.

The net profits Rs. 1,03,495 or Rs. 1·02 per train-mile.

The working expenses were 64·11 per cent of the gross receipts, leaving 35·89 per cent as net profit.

The total traffic was in the following proportion :—

Coaching	..	..	..	66·77 per cent.
Goods	..	..	..	32·18 per cent.
Miscellaneous	..	..	..	1·05 per cent.

The result of the year's working as compared with the average on other lines is as under :—

Receipts.				Average of 8 other lines, 85·75 miles.		Mysore, 85·75 miles miles.	
				Rs.	Per Train-milo.	Rs.	Per Train-milo.
Coaching	...	...	...	2,66,380	2·79	1,92,555	3·66
Goods	...	...	...	3,82,022	2·86	92,818	1·90
Miscellaneous	...	...	...	21,990	0·09	3,017	0·03
Gross receipts	...	...	...	6,70,192	2·93	2,88,390	2·84
Working expenses	...	...	...	3,76,265	1·65	1,84,895	1·82
				2,93,927	1·28	1,03,495	1·02
Number of Train-miles.....				2,28,651		1,01,479	

It must be remembered that in this case Mysore at its start is being compared with other lines that have been at work for some years. The number of train-miles was not one-half of the average number on which the comparison is made, and in goods traffic which yields the highest revenue Mysore was only at work for 7 months out of the 12. Apparently time only is wanting to secure a better result.

Working Expenses.—(Table M).—

The expenditure under different heads is in the following proportion :—

Heads.				Of Total Expenditure per cent.	Of Gross Receipts per cent.
Maintenance	...	...	...	18·85	12·09
Locomotive	...	...	...	40·02	25·65
Carriage and Wagon...	...	...	...	5·14	3·29
Traffic	...	...	...	16·29	10·45
General...	...	...	...	18·27	11·71
Special and Miscellaneous	...	...	...	1·43	0·92
				100·00	64·11

The detail of expenditure—Mysore line—is now entered in comparison with the average on 8 other lines, *viz* :—

Expenditure.	Average of 8 lines, 85·75 miles.		Mysore, 85·75 miles.	
	Amount, Rs.	Per Train- mile.	Amount, Rs.	Per Train mile.
Maintenance	88,932	0·39	34,856	0·34
Locomotive	1,40,362	0·61	73,986	0·73
Carriage and Wagon	26,890	0·12	9,501	0·09
Traffic	60,265	0·26	30,131	0·30
General	49,044	0·21	33,781	0·33
Steam Boat	5,747	0·03	...	...
Special and Miscellaneous	5,025	0·03	2,640	0·03
Total...	3,76,265	1·65	1,84,895	1·82
Number of Train-miles...	228,651		101,479	

That is to say Mysore has done rather less than half the work shown for the average of 8 other lines at something less than half the expenditure, the increase in cost per train-mile being increased on the less work from Rs. 1·65 to 1·82.

A few remarks are now offered with regard to the working expenditure under the different heads.

Maintenance.—Is less than the average. This is due to the line being new and no ballast was charged to Revenue during the first half of the year.

Locomotive.—The total expenditure is about $\frac{1}{3}$ th higher than the average per train-mile.

The detail of the expenditure is as under :—

	Rs.	Per Cent to Total.
General superintendence ..	8,114	10·97
Running expenses ..	21,424	28·96
Fuel ..	29,305	39·61
Water ..	4,414	5·96
Oil ..	3,297	4·45
Maintenance and renewal ..	5,014	6·78
Unclassified ..	2,418	3·27
	<u>Rs. 73,986</u>	<u>100</u>

General superintendence may be high, but it includes salaries of Superintendents and Assistants who could look after a greater length of line for the same money.

Running expenses chiefly consist of wages and allowances and these are not high in Mysore.

Fuel.—Consists of coal purchased from Madras at Rs. 33 per ton and wood purchased from the State at Rs. 6 per ton of 68 cubic feet during the first half of 1882. It was then found that owing to an alteration in the style of stacking the fuel that the Railway had been paying the State at a rate of Rs. 6—14—5 per ton, and from 1st July 1882 it was arranged that the Railway should pay Rs. 6 per ton for fuel contained in 80 cubic feet. The price of wood fuel on Madras Railway is Rs. 5 per ton and on the S. I. R. Rs. 4 per ton.

The following table is extracted from page 15 of the Director General of Railways Administration Report:—

Statement showing Source and Description of Fuel used and the Consumption and Cost per Train-mile.

Railway.	Source and Description of Fuel used.	Per Train-mile.	
		Consumption in lbs.	Cost in Annas.
1. South Indian ...	... English Coal ...	27.01	3.10
2. Rajputana-Malwa ...	... English and Bengal Coal ...	31.96	4.98
3. Northern Bengal ...	... Bengal Coal ...	31.84	2.69
4. Tirhoot ...	... Do ...	33.67	2.74
5. Cawnpore-Furruckabad ...	... Do ...	31.25	3.39
6. Nagapür-Chattisgarh ...	... Danira Coal and Wood ...	67.00	4.00
7. Rangoon and Irrawady ...	... English Coal ...	20.36	2.41
8. Bhavnagar-Gondal ...	... Do ...	19.36	2.55
9. Mysore ...	... Wood ...	89.82	4.62

From the above it will be seen that on—

Railways—	Fuel.	Average per Train-mile.	
		Consumption in lbs.	Cost Annas.
Nos. 1, 7, 8 ...	... English Coal ...	22.24	2.68
Nos. 3, 4, 5 ...	... Bengal Coal ...	32.25	2.94
No. 9 ...	... Wood ...	89.82	4.62

1 lb. of English coal = 1.45 lbs. of Bengal coal = 4 lbs. of Mysore wood, while the prices are respectively as 100 to 109 to 175.

The price of Mysore wood admitted of reduction and a rate is now in force of Rs. 5 per ton. The price of coal from Madras is high, but as little of it is used as is possible.

As regards the comparative value of wood and coal it has generally been accepted that 3 tons of wood was equivalent to 1 ton of English coal, but from the comparison made above whether from incorrect measurement or not, 4 tons of Mysore wood are equivalent to 1 ton of English coal. On the Madras Railway during 5 years ending 1877 the proportion was 3.35 of wood to 1 of coal, while in 1877 it was 3.98 tons of wood to 1 of coal.

But if reference is made to the Director General of Railways' Table on page 15 it will be seen that the consumption of fuel on lines burning wood as fuel is as under:—

	lbs.
Madras	83.10
Indus Valley and Kandahar	93.08
Nizams	79.28
	3) 255.46

Average 85.15 lbs. per train-mile,

while Mysore by the same statement consumes 89.82 lbs.

As regards consumption of fuel the following extract from a report by the Locomotive Superintendent is inserted:—

“Owing to the steep grades on the Bangalore-Mysore section consumption of fuel will always be comparatively high.

“Of the total length of 86 miles 70 are on grades mostly 1 in 70, and to train full loads up those grades, regulators have to be nearly full opened and reversing lever thrown over 2 or 3 notches; which means cutting off steam at $\frac{2}{3}$ th stroke, instead of $\frac{1}{2}$ or $\frac{3}{4}$ th intensifying the blast and discharging the heat into the air with such force that its useful effect in generating steam is much impaired.

“It may be said that the extra power required to haul trains up grades is retorted in descending the same. This is not so, for immediately a train enters on a descending grade of 1 in 70 brakes have to be applied to keep it under control, and all power absorbed by the brakes is of course lost.

“If the grades were 1 in 100 then there would be no loss of power, as the speed due to gravity would be about 18 miles an hour, or well within that authorized.”

Carriage and Wagon.—The expenditure is less than the average owing to the stock being new.

Traffic.—The excess on the average is due to the cost of general superintendence which is sufficient to look after a greater length of line.

General charges.—Are high. They include salaries for management, audit, accounts, stores, &c., while Rs. 10,545 or nearly $\frac{1}{3}$ rd of the whole expenditure of this abstract was paid to the Government Telegraph Department for rent, maintenance and inspection.

Special and Miscellaneous.—Are not in excess of the average, but half of the expenditure under this abstract consisted of Rs. 725 for compensation, and Rs. 1,863 for bonus to Railway employes on the opening to Mysore and at the Dasara festival.

On the whole this short line from the commencement of its work gives a favorable result when compared with other lines that have been at work for some length of time

BANGALORE,
11th August 1883.

A. LEMESSURIER, *Lieut.-Col., R. E.*
Consulting Engineer of the Govt. of Mysore.

APPENDIX.

TABLES **A** TO **M** TO ACCOMPANY ADMINISTRATION REPORT,

1882—83,

MYSORE STATE RAILWAY.

TABLE A.

Statement showing lengths of Metre Gauge Railways sanctioned and open for Traffic on 31st March 1883.

Railways.	Length of line sanctioned.	Total length open on 31st March 1883.	Length remaining to be finished.	Remarks.
Guaranteed Companies.				
South Indian	653½	653½	...	Rails weighing 68 lbs., 40½ lbs. and 35½ lbs. per yard laid on wooden sleepers. Magaratum to Erode 167 miles converted to metre gauge 1875-79.
Assisted Companies.				
Southern Mahatta	435	...	435	Commenced as a famine relief work in April 1879, but from 1st October 1882 the system was made over to a company with a Government guarantee of 4 per cent up to 1st June 1887 and thereafter 3½ per cent on a Capital of £ 3,000,000 and 3 per cent on all expenditure in excess of this sum.
Bengal and North-Western	455	...	455	Easy country and no engineering difficulties. 41½ lbs. steel rails on plate sleepers. Sanctioned as a Productive Public Work on 18th May 1882. From 1st January 1883 line will be handed over to a limited liability Company with free gift of land but no guarantee. Government shares with Company profits over 6 per cent per annum.
Baldynath-Deoghur	6	4	2	Many curves, steep gradients and heavy work. Rails 36 lbs. on wooden sleepers. Capital raised locally without any guarantee but with a free gift of land.
Assam Light Railway	75	15	60	Rails 30 lbs. per yard on existing Government road. Government has given 5 per cent guarantee for 20 years on a maximum capital of 16 lakhs of rupees.
Rohilkhand-Kumaon	62	...	62	Under a Government guarantee of 4 per cent on a maximum capital of 2 lakhs during construction or until January 1885.
West of India Portuguese	49½	...	49½	Under a guarantee given by the Portuguese Government in January 1881.
Pondicherry	7½	...	7½	Under a concession made by the French Government. Iron rails 40½ lbs. on wooden sleepers.
Total Assisted Companies	1,090	19	1,071	
State Imperial.				
Punjab Salt Branch	73½	73½	...	Rails 36 lbs. per yard.
Rajputana-Malwa	1,417½	1,203½	214	The Maharaja Holkar lent British Government 100 lakhs at 4½ per cent per annum and the Maharaja Sindia lent 75 lakhs at 4 per cent per annum.
Total State Imperial	1,491½	1,277½	214	Rails 36 and 40 lbs. per yard on deodar sleepers.
State Provincial.				
Northern Bengal	252½	232½	20	Rails 40 lbs. per yard on wooden and iron sleepers. Bridging heavy.
Tirhoot	240	155½	84½	Rails 40 lbs. per yard on pine sleepers.
Dacca-Mymensingh	85	...	85	Ordinary metre gauge type.
Muttia-Bhatras	29	29	...	Rails 30 lbs. on metalled road.
Muttia-Achmura	24	23	1	Rails 41½ lbs. per yard. Commenced as famine relief work in 1878.
Cawnpore-Furruckabad	197	86	111	Rails 40 lbs. and 41½ lbs. per yard.
Bareilly-Philibit	33	...	33	Rails 41½ lbs. per yard.
Nagpur and Chhattisgarh	149	149	...	Rails 40 lbs. per yard on wooden sleepers. Will be altered to broad gauge in connection with Railway from Sitarampur.
Burma	368½	161	205½	Rails 40 lbs. per yard. Works are light, but bridging heavy. Work will continue as soon as funds can be provided from Provincial Revenues.
Total State Provincial	1,378	838½	539½	
Native States.				
Bhavnagar-Gondal	192½	192½	...	Rails 40 lbs. per yard on half round sleepers. Line constructed by Government under committee of management from the revenues of Bhavnagar and Gondal States.
Jodhpore	18½	18½	...	
Mysore	129	86	43	Rails 41½ lbs. per yard on wooden sleepers. Commenced as a famine relief work in 1877, and constructed from Mysore revenue. Bridging heavy. 68 arches over Cauvery river.
Total Native States	340	297	43	
SUMMARY.				
Guaranteed Lines	653½	653½	...	
Assisted Lines	1,090	19	1,071	
State { Imperial	1,491½	1,277½	214	
{ Provincial	1,378	838½	539½	
Native States	340	297	43	
	4,591	3,083½	1,867½	

A. LEM.

CAPITAL—TABLE B.
Total Expenditure on Metre Gauge Railways appropriated to the various undertakings to 31st December 1882.
 Extracted from pages 38 and 39 of Director General of Railways Administration Report.

Extracted from pages 33 and 34 of District Report														
Railways.	Length of Railway open in miles.	Total Expenditure including Suspend.	Classification of Expenditure										Total Expenditure including Suspend.	REMARKS.
			Preliminary Expenses.	Land.	Construction of line.	Ballast and Permanent Way.	Stations and Buildings.	Steam Engines, Boilers, &c.	Plant.	Rolling Stock.	Establishment.	Suspense on Capital Accounts.	Receipts on Capital Accounts deducted.	
1 Kujumana-Malwa	1,115.55	7,94,22,831*	18,80,568	6,73,517	2,03,37,551	2,35,66,815	91,58,339	...	15,38,965	1,23,20,223	54,49,074	45,54,857	57,978	7,94,22,831*
2 Northern Bengal	213	2,09,28,406	1,26,480	8,33,256	58,13,023	55,08,373	25,17,745	4,10,395	8,02,619	22,92,641	22,56,492	4,03,227	43,845	2,09,28,406
3 Rancon and Irrawal Valley	161	1,33,09,835	54,589	1,96,121	30,92,944	42,84,838	18,63,848	...	4,10,054	17,25,027	10,69,584	6,27,070	6,240	1,33,09,835
4 Tirhoot	82	61,09,590†	11,644	1,92,878	10,26,022	24,29,500	2,94,007	2,44,357	2,27,555	5,85,340	5,92,665	—90,932	3,552	61,09,590†
5 Nagpore-Chhattisgarh	149	90,64,388	2,15,932	38,506	32,49,636	25,19,925	9,75,202	...	2,80,447	8,10,607	7,10,836	2,69,214	5,665	90,64,388
6 Calcutta-Farruckabad	86.50	32,98,712†	29,904	62,233	4,41,684	14,16,538	3,27,738	713	49,090	5,95,151	2,01,222	78,987	283	32,98,712†
7 Bhavnagar-Gondal	193	86,75,711	51,337	...	29,63,835	27,65,063	5,59,168	...	3,62,015	11,46,634	4,89,805	3,15,382	7,628	86,75,711
Total for 7...	2,780.05	14,07,17,473	23,72,504	19,96,011	3,69,47,795	4,24,90,850	1,69,00,047	6,55,465	36,70,785	1,84,78,629	1,07,66,778	61,63,805	1,25,196	14,07,17,473
Average on Nos. 1 to 7 for	1	69,317†	1,169	983	18,201	20,931	8,029	323	1,808	9,595	5,904	2,036	62	69,317†
8 Bangalore-Mysore	85.75	42,90,214	93,939	28,327	10,11,276	14,97,333	3,54,990	...	61,563	6,05,459	3,62,017	2,78,883	8,593	42,90,214
Average on Mysore for	1	50,031	1,096	447	11,793	17,482	4,140	...	717	7,060	4,222	3,194	100	50,031
Percentage on Total...	...	160	219	89	23.57	34.91	8.27	...	1.44	14.11	8.44	6.93	20	100
A. I. E. M.														

A. LEM.

CAPITAL—TABLE C.
Expenditure appropriated up to 31st December 1882.

Railways	Classification of Expenditure per mile.												Remarks.		
	Preliminary Expenses.		Land.	Construction of Line.	Ballast and Permanent Way.	Stations and Buildings.	Steam Petries.	Plant.	Holding Stock.	Establishment.	Total Cost.	Product Receipts on Capital Account.		Cost per mile.	Suspense per mile.
	A.	B.	C.	D.	E.	F.	G.	H.	J.	K.	L.	M.	N.	O.	
1 Rajputana-Malwa	1,686	604	18,231	21,125	8,210	...	1,380	11,044	4,865	67,165	52	67,113	4,083	71,196	Rs. *D. G. R. makes this 82,578
2 Northern Bengal	520	8,428	23,921	27,667	10,360	1,697	3,302	9,434	9,285	84,614	180	84,434	1,683	86,117	
3 Rangoon and Irrawady Valley	352	1,218	19,150	27,615	11,596	...	2,541	10,715	6,936	78,813	39	78,774	3,898	82,670	
4 Tirhoot	149	2,352	12,513	29,628	10,902	2,980	2,776	7,138	7,228	75,659	43	75,616	—	74,507	Rs. †D. G. R. makes this 95,222
5 Nagpore-Chhattisgarh	1,450	256	21,810	16,912	6,545	...	1,882	5,440	4,771	59,065	38	59,028	1,807	60,835	
6 Cawnpore-Farruckabad	348	719	5,144	16,357	3,790	...	567	6,916	2,327	36,184	3	36,181	913	37,094	Rs. †D. G. R. makes this 37,093
7 Bhavnagar-Gondal	268	0	15,512	14,327	2,897	...	1,876	5,941	2,538	43,357	39	43,318	1,694	44,952	
8 Bangalore-Mysore	1,096	447	11,793	17,462	4,140	...	717	7,060	4,222	46,937	100	46,837	3,194	50,031	
Ditto Percentage of Total...	219	89	23.57	34.91	8.27	...	1.44	14.11	8.44	93.82	20	93.62	6.38	100	

A, LaM.

A, LAM.

TABLE D.

Statement showing the Number of Engines and Vehicles used in conveying Traffic and the number of miles travelled by Trains during the year ending 31st December 1882.

1	2	3	4	5	6	7	8	Miles open on 31st December 1882.	Engines.				Carriages.				Total number.				Goods vehicles of all descriptions (excluding brakes).	Brakevans.	Number of Engines and Vehicles used in conveying traffic.			Number of train miles run.		
									First Class.	Second Class.	Third or Intermediate Class.	Fourth or lowest class.	Composite.	Miscellaneous coaching vehicles (excluding brakes).	Goods vehicles of all descriptions (excluding brakes).	Passenger.	Goods.	Mixed (S).	Total.	Number of train miles per open mile.								
...	...	...	...	...	...	...	...	663	120	36	34	...	333	10	421	25	1,584	96	563,634	872,718	874,946	1,423,782	2,177					
...	...	...	...	...	...	...	...	1,115-55	301	88	72	42	437	26	668	137	4,683	228	1,507,391	2,146,663	1,294,874	3,741,254	3,357					
...	...	...	...	...	...	...	...	243	36	24	6	10	64	9	103	19	780	30	225,513	349,377	186,368	645,699	2,858					
...	...	...	...	...	...	...	...	82	14	8	3	28	...	4	43	12	350	20	94,116	136,939	133,910	219,141	3,613					
...	...	...	...	...	...	...	...	86-50	11	6	4	...	72	4	86	9	221	10	78,183	60,952	129,765	198,167	1,337					
...	...	...	...	...	...	...	...	149	16	5	4	4	24	5	43	8	457	15	55,615	129,336	63,790	189,601	1,826					
...	...	...	...	...	...	...	...	161	31	7	14	...	113	12	149	23	906	33	232,484	253,354	229,459	487,738	3,169					
...	...	...	...	...	...	...	...	193	20	13	8	...	53	4	81	8	54	22	136,956	153,475	141,838	295,416	1,541					
Total.....									549	183	144	84	1,022	87	1,358	234	9,771	443	2,974,292	4,156,310	3,067,640	7,123,999	2,614					
Average for 2693-053 + 1-4 miles									17-5	5-9	4-6	2-7	34-7	2-7	50-6	7-3	311	14	94,723	151,472	94,785	227,193	2,649					
Mysore...									12	12	6	...	*53	...	71	...	4164	7	52,631	48,818	41,994	101,479	1,184					

REVENUE—TABLE E.
General Results of working of the principal Indian Railways during the year ending 31st December 1882.

Headings.	Narrow gauge.										Progressive number.
	South Indian. (A)	Rajputana Malwa.	Northern Bengal.	Tinoot.	Cannore Pondicherry.	Nagpur and Cuttack.	Rangoon and Bravady Valley.	Blavanger Gondal.	Total.	Average on Nos. 1 to 8 (26-7705- 81-2)	Mysore. 0
Miles open on 31st December 1882, Mil. s.	683.	1,115.55	930.	79.	86.50	149.	161.	153.	2,677.05	877.1	877.1
Capital outlay ...	4,53,57,777.	9,21,17,406.	7,409,92,406.	78,98,22,600.	3,208,949.	90,04,388.	1,33,03,895.	83,75,711.	20,04,45,824.	64,25,283.	42,91,214.2
Do per mile open (a)	66,681.	78,359.	7,927,446.	74,509.	36,197.	59,024.	78,775.	43,318.	5,18,911.	10,327.	48,533.3
Coaching receipts ...	21,14,907.	37,60,873.	5,70,673.	2,60,800.	18,72,000.	1,38,762.	8,16,020.	4,63,576.	83,11,077.	2,78,989.	1,92,534
Gross receipts ...	1,14,482.	70,24,883.	12,36,268.	9,97,188.	1,57,730.	4,33,109.	7,53,311.	3,99,003.	1,19,19,085.	3,78,012.	3,28,012
Gross earnings ...	8,13,713.	1,09,29,000.	21,45,910.	8,00,912.	3,78,812.	6,04,086.	13,75,891.	8,76,866.	5,09,10,002.	6,70,193.	5,83,300
Working expenses ...	25,00,836.	58,09,377.	10,33,337.	4,02,973.	7,34,702.	4,13,113.	9,45,260.	5,22,189.	1,17,39,481.	8,73,355.	7,54,897.1
Do per cent of gross receipts (b)	82.46.	3,907.	48.64.	6.51.	67.33.	68.79.	39.85.	59.53.	56.4.	87.3.	87.3
Net earnings ...	1,12,886.	51,20,622.	10,93,573.	2,44,047.	1,17,110.	1,89,171.	6,30,431.	3,54,647.	91,70,541.	2,73,827.	1,97,493
Net per cent on capital outlay (c) x 100	3.03.	5.57.	5.28.	3.55.	3.65.	2.69.	4.74.	4.09.	4.57.	4.57.	4.57
Passenger train miles ...	345.	583,034.	325,113.	94,110.	78,132.	56,675.	232,484.	136,820.	2,974,292.	95,380.	95,380
Goods train miles ...	87,478.	9,146,863.	383,577.	130,331.	60,032.	129,339.	255,354.	155,476.	4,159,617.	1,33,321.	45,518.13
Total train miles ...	1,425,732.	3,744,254.	618,690.	224,441.	138,164.	186,011.	487,838.	292,296.	7,133,909.	2,28,701.	1,40,788.14
Coaching receipts per passenger train mile (d)	3.22.	2.29.	2.3.	2.77.	2.37.	2.43.	3.51.	3.30.	2.79.	2.79.	2.79
Goods receipts per goods train mile (e)	1.62.	3.27.	3.18.	1.98.	3.35.	3.35.	2.88.	2.37.	1.016.	2.86.	1.016
Gross receipts per train mile (f)	2.83.	2.92.	3.49.	2.70.	2.90.	3.23.	3.23.	2.99.	2.83.	2.93.	2.8117
Working expenses per train mile (g)	1.63.	1.55.	1.71.	1.36.	1.75.	2.23.	1.94.	1.79.	1.64.	1.84.	1.8218
Net earnings per train mile (h)	0.98.	1.37.	1.78.	1.04.	0.85.	1.02.	1.29.	1.20.	1.28.	1.09.	1.0219
Average number of passengers in a passenger train...	289.57	188.95	142.39	175.00.	207.10	200.00	215.04.	212.09.	163.02.	503.78.	299.38
Average number of tons in a goods train	45.19	60.43	54.17	45.50.	57.38.	50.32.	58.47.	47.15.	419.41.	52.42.	25.9021
Average number of vehicles (excluding brakevans).											
In each passenger train ...	10.76	13.50	13.58	19.00.	...	0.14	17.11.	16.30.	90.37.	11.20.	10.8322
In each goods train ...	15.75	21.32	29.88	24.00.	29.01.	16.18.	21.89.	23.80.	181.05.	22.70.	11.0123
In each mixed train { Passenger vehicles ...	7.91	12.82	7.34	7.00.	14.78.	17.00.	11.38.	13.60.	82.34.	11.51.	13.45
Number of passengers carried one mile ...	9.60	8.04	11.43	6.00.	5.77.	8.31.	11.63.	3.70.	67.08.	8.38.	8.41
Number of tons of goods carried one mile ...	149,246,844.	301,836,890.	32,111,069.	10,501,747.	16,174,471.	11,316,576.	49,994,556.	31,763,240.	608,315,323.	19,517,158.	11,042,000.55
Number of tons of goods carried one mile ...	39,438,969.	130,807,716.	11,164,314.	6,389,935.	3,444,864.	6,534,452.	14,923,488.	7,345,971.	230,438,309.	7,355,845.	1,269,023.26
Average cost of hauling for one mile.											
One passenger unit ...	1.02	1.19.	1.25.	1.13.	1.43.	1.83.	1.42.	1.21.	10.51.	1.31.	1.38.97
One ton of goods ...	6.89	5.32.	5.78.	5.86.	5.92.	9.93.	6.31.	7.57.	53.93.	6.78.	1.9028
Average sum received for carrying for one mile.											
One passenger unit ...	2.59	2.16	2.98	2.71	2.06	2.74	2.92	2.58	20.24.	2.53.	3.05.29
One ton of goods ...	7.75	10.29	11.25	8.14	9.36	15.31	9.93	10.40	79.80.	9.92.	1.97.99

f—Excludes Steamer service and suspension of traffic in Mysore which includes suspension.

g—Includes Perambalur Section.

h—Calculated upon 243 miles including Perambalur Section.

i—Includes Pondicherry Railway except in Nos. 2, 3, 10 and 11.

Note.—Figures in columns 1 to 8 have been taken from D. G. R. Administration Report, page 53.

A. LEM.

REVENUE—TABLE F.

Statement showing the Passenger Traffic on Metre Gauge Railways during the year ending 31st December 1882.

Railways.		Miles open on 31st Decem-ber 1882.	PASSENGER TRAFFIC.										FARES per MILE.								
			First Class.		Second Class.		Third or Intermediate.		Fourth or Lower.		Other Coaching Traffic.		Total.	1st Class.	2nd Class.	Intermediate or 3rd Class.	4th or Lowest Class.				
			Number.	Receipts.	Number.	Receipts.	Number.	Receipts.	Number.	Receipts.	Number.	Receipts.									
1	South-Indian...	...	689.	7,807	48,438	42,622	62,669	...	...	Rs.	3,792,617	19,03,284	1,01,501	Ps.	3,843,046	21,14,967	12	4	3	2-6d	Deducted from Station to Station fares.
2	Rajputan-Malwa	...	1,115.55	15,272	1,30,211	48,399	1,23,230	59,102	63,039	4,047,815	20,65,156	3,58,939	5,070,368	18	9	3	2-6d				
3	Northern Bengal	...	280.	4,221	48,328	7,756	37,607	14,815	34,040	657,802	3,78,325	72,393	684,624	18	9	4-0	2-50				
4	Tilhoet	...	79.	3,523	13,748	4,437	8,791	...	...	483,701	2,10,165	27,904	491,691	18	9	...	2-50				
5	Cawnpore-Furruckabad	...	56.50	725	2,662	2,245	4,467	...	...	613,251	1,60,658	11,579	616,251	15	8	...	2				
6	Nagpore and Chhattisgarh	...	149.00	2,622	3,330	15,211	6,113	15,383	4,361	557,910	1,12,987	12,871	591,326	18	8	4	2				
7	Rangoon and Irrawaddy Valley	...	161.00	3,838	12,971	16,891	21,440	...	...	1,554,183	7,55,918	27,355	1,574,975	14.9	7.45	...	2-6d				
8	Bhavnagar-Gondal	...	193.	1,961	5,961	11,830	14,784	...	...	680,063	4,06,764	36,047	693,854	12	6	...	2-50				
			Total.....	2,677.05	40,029	2,65,544	149,391	2,78,307	89,550	1,02,340	13,287,375	70,16,557	6,43,023	13,566,325	83,11,077	12.9	6.45	11.50	2.14		
			Average of Nos. 1 to 8 f.m.	85.75	1,288	8,514	4,728	8,926	2,870	3,280	425,877	2,24,500	20,770	434,818	2,66,380	15.7	7.55	3.83	2.64		
9	Mysore	...	85.75	3,853	8,550	7,644	6,670	...	...	307,528	1,60,232	16,863	319,025	1,92,555	12	6	...	3*			
			Percentage of Total....	...	1.21	4.60	2.40	3.46	...	...	96.39	83.21	6.73	100	100	* Through booking with all Stations, Madras Railway, was introduced on 15th December 1882.					

* Through booking with all Stations, Madras Railway, was introduced on 15th December 1882.

A. LEM.

REVENUE—TABLE G.

Statement showing the Goods Traffic on the 9 Metre Gauge Railways during the year ending 31st December 1882.

Railways.	Miles open on 31st December 1882.	GOODS TRAFFIC.											
		General Merchandise.		Military Stores.		Railway Materials for Construction.		Coal for Revenue only.		Revenue Stores other than Coal.		Live Stock.	
		Tons.	Receipts, Rs.	Tons.	Receipts, Rs.	Tons.	Receipts, Rs.	Tons.	Receipts, Rs.	Tons.	Receipts, Rs.	Tons.	Receipts, Rs.
1 South-Indian ...	663	415,403	14,40,555	293	7,399	100,314	37,783	...	...	10,182	15,549	3,95,347	59,042
2 Rajputana-Malwa ...	1,115.55	595,476	64,68,031	5,035	52,904	167,134	1,89,126	2,436	12,414	46,391	1,95,404	73,149	89,883
3 Northern Bengal ...	230	162,059	11,60,940	188	2,977	4,430	9,737	3,253	17,233	13,876	31,167	6,284	16,034
4 Tirhoot ...	70	101,793	2,04,889	15	92	37,852	53,236	20,693	26,977	3,451	2,818	1,768	1,880
5 Cawnpore-Furruckabad ...	88.50	39,480	1,49,930	1,028	10,652	808	476	996	4,015	110	277	5,604	2,590
6 Nagpur and Chhattisgarh ...	149	114,811	4,17,092	538	419	30,256	25,799	559	9,201	1,959	4,233	27,464	4,494
7 Rangoon and Irrawaddy Valley ...	161	174,677	6,85,832	...	4	17,541	13,318	593	94	5,214	1,522	9,613	11,150
8 Bhavnagar Gondal ...	193	50,946	3,38,636	...	...	64,672	52,202	4,453	2,958	1,950	1,358	1,733	2,573
Total	2,677.55	1,853,769	1,08,66,111	7,089	74,507	422,986	3,81,451	32,719	65,453	82,536	252,484	5,20,819	2,17,595
Average of Nos. 1 to 8 for—	89.75	53,005	3,48,273	227	2,388	13,537	12,226	1,649	2,698	2,644	8,092	16,693	6,974
9 Mysore ...	65.75	12,482	54,567	7	67	6,957	33,924	...	...	27	82	3,199	3,150
Percentage of Totals.....	...	56.37	58.80	0.52	0.07	23.89	36.62	...	...	12	0.9	14.47	3.39

A. LEM.

REVENUE—TABLE H.
Table showing Ordinary Goods Rates on the Metre Gauge Railways on the 1st January 1883.

		Goods Rates per ton per mile.															
		Railways.		Special Class.													
				Food-grain.		Coal.		1st Class.		2nd Class.		3rd Class.		4th Class.		5th Class.	
				Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.
1	South-Indian	...	...	a 9	a 9	a 9	a 9	b	b	b	b	b	b	b	b	b	b
2	Rajputana-Malwa	...	...	c 9-53	c 9-53	c 9-53	c 9-53	9-53	14-29	14-29	19-05	19-05	23-14	23-14	27-22	27-22	27-22
3	Northern Bengal	...	...	d 9-07	d 9-07	d 9-07	d 9-07	9-07	18-15	18-15	27-22	27-22	...	...	...	...	...
4	Tirhoot	...	...	8-80	8-80	5-44	5-44	9-07	19-61	19-61	18-15	18-15	22-08	22-08	27-22	27-22	27-22
5	Cawnpore-Furruckabad	...	...	7-62	7-62	7-62	7-62	9-00	19-61	19-61	18-00	18-00	22-68	22-68	27-22	27-22	27-22
6	Nagpur and Chhattisgarh	...	...	8-17	8-17	5-99	5-99	10-00	14-15	14-15	23-93	23-93	34-50	34-50	43-18	43-18	43-18
7	Rangoon and Irrawaddy	...	...	e 12-79	e 12-79	e 12-79	e 12-79	f 12-79	f 17-15	f 17-15	f 23-96	f 23-96	...	...	...	...	...
8	Bharanagar-Gondal	...	...	7	7	8	8	10-83	16-33	16-33	21-73	21-73	27-22	27-22	32-03	32-03	32-03
9	Mysore	...	...	7	7	h	h	9-00	9-50	9-50	9-00	9-00	...	...	...	...	...

The goods rates were introduced on 1st June 1882, and through loading with Madras Railway was introduced on 1st August 1882.

a. A rate of 64 pies per ton per mile is charged on consignments of grain and seeds of not less than 8 tons carried for distances of 300 miles and upwards, at owner's risk, in through booking with the Madras Railway; and also locally for consignments of not less than 8 tons.

b. On the South Indian Railway all goods (not in the exempted list) are carried at 8-91 pie per ton per mile. In through booking with the Madras Railway, the rate charged for goods (not in the exempted list) carried in the 2nd, 3rd, 4th and 5th Classes of the Madras Railway classification is as follows: 1st Class 13-5 pie per ton per mile, and for Special and 1st Class goods carried in the Madras Railway tariff, 8-91 pie per ton per mile. Exempted goods are carried at 27 pies per ton per mile and all articles of an explosive or combustible character at 54 pies per ton per mile.

c. When transported in carriages of not less than 10 tons, the rates of freight are for distances from 1 to 100 miles 9-53 pie per ton per mile; from 101 to 200 miles 6-75 pie, from 201 to 400 miles 4-05 pie, and over 400 miles 2-70 pie.

d. For distances over 10 miles the rate charged is 6-00 pie per ton per mile.

e. The rates are charged on consignments when sent in full wagon loads.

f. The rates in force for from station to station, viz. 8 annas 8 pies per ton for 1st Class, 20 annas 11 pies for 2nd Class, and 14 annas for 3rd Class. The mileage rates shown in this statement are calculated on the basis of these station to station rates.

g. There are classes only, called Upper, Middle and Lower.

h. Ordnance stores 22½ pie per ton per mile, explosives 54 pie per ton per mile.

A. L.M.

REVENUE

Statement showing the Quantities of the principal Articles of merchandise, &c., carried

Classification number.	Articles.	Metre Gauge							
		South Indian. 1		Rajaputana-Malwa. 2		Northern Bengal. 3		Tirhoot. 4	
		Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
I	Animals	3,136	3,048	302	2,389	...	...	...	...
II	Borax	...	...	83	2,966	...	...	...	...
III	Canes and rattans	...	...	969	11,161	...	...	...	...
IV	Cacotehu	...	...	2	15	...	...	...	...
V	Chinese and Japanese Ware	...	...	55	1,384	...	...	...	...
VI	Coal and Coke	...	...	2,136	12,415	...	...	24,174	29,755
VII	Cotton-wool	9,776	59,463	26,826	3,69,725	...	...	454	2,565
VIII	Cut or unmanufactured	9,548	1,09,290	19,730	5,47,710	5,090	54,731	4,939	18,905
IX	Drugs and medicinal lines	...	...	701	15,782	...	...	28	480
X	Dyeing materials	3,593	18,781	5,076	91,648	...	...	1,766	8,103
XI	Earthenware and porcelain	65	321	119	2,020	...	...	...	...
XII	Fibrous products	...	...	5,844	54,093	66,369	4,66,359	1,059	2,719
XIII	Fruits and nuts	17,420	68,601	12,144	1,74,981	...	...	116	463
XIV	Gum and resins	103,066	3,68,431	112,839	8,37,386	21,729	1,14,916	15,676	25,850
XV	Guns and skins	...	...	733	12,378	...	...	...	...
XVI	Hides and skins	4,273	27,763	4,085	85,776	...	...	2,154	6,675
XVII	Horns	...	...	103	1,730	...	...	...	...
XVIII	Lace	...	...	233	3,499	...	...	223	468
XIX	Leather	...	...	509	7,631	...	...	...	...
XX	Liquors	2,196	11,333	705	21,847	...	...	223	1,179
XXI	Mats	601	3,995	21	353	...	...	...	...
XXII	Metals	7,177	48,116	15,644	3,20,465	3,713	37,090	3,177	9,683
XXIII	Oils	7,882	38,223	1,554	28,106	...	...	882	1,797
XXIV	Opium	...	...	4,081	73,007	...	...	...	...
XXV	Paints and colors	...	...	244	6,763	...	...	136	571
XXVI	Provisions	17,561	77,862	6,990	1,34,882	...	...	805	3,309
XXVII	Salt	25,420	98,870	1,01,646	13,59,676	17,390	61,750	14,878	25,235
XXVIII	Sulphate	...	...	510	7,369	...	...	5,505	10,344
XXIX	Seeds	29,117	1,06,795	67,645	4,56,968	...	...	21,831	35,172
XXX	Silk	...	...	161	8,500	...	...	...	...
XXXI	Spices	851	4,417	1,176	25,467	...	...	1,395	3,916
XXXII	Stone and marble	94,788	59,940	5,780	35,997	...	...	1,105	2,578
XXXIII	Sugar	28,741	1,02,971	88,344	1,039,177	...	...	728	1,910
XXXIV	Tea	8	105	462	17,209	5,779	1,34,002	...	...
XXXV	Tobacco	3,030	15,228	7,533	1,20,610	12,393	1,04,596	7,421	14,724
XXXVI	Wood	15,254	30,685	14,061	9,475	...	...	3,109	5,442
XXXVII	Wool	...	...	3,397	59,616	...	...	...	...
XXXVIII	All other articles of merchandise	37,294	1,78,810	30,426	2,54,413	49,719	2,60,974	43,718	66,841
XXXIX	Bark (tanning)	...	...	...	...	...	...	...	...
XL	Coffee	...	...	...	...	...	...	...	...
XLI	Government stores	...	...	...	...	...	...	58	371
XLII	Manures	...	...	...	...	...	...	630	1,420
XLIII	Vegetables	...	...	...	...	...	...	294	857
XLIV	Chinaman and lime	...	...	...	...	...	...	9,604	9,069
XLV	Hay and straw and grass	...	...	...	...	...	...	...	...
XLVI	Railway materials	...	...	1,67,134	1,89,126	...	...	...	...
XLVII	Revenue stores	...	...	1,19,539	2,85,288	...	...	...	...
XLVIII	Miscellaneous	...	...	...	...	...	...	...	...

—TABLE J.

and the Receipts therefrom on Metro Gauge Railways for 1882.

Railways.

Channarayana Farrukabad.		Nagpur-Chhattisgarh		Rangoon and Lower Valley.		Bharanagar-Gondal.		Total.		Average of 8 Railways.		Mysore.	
Quantity.		Quantity.		Quantity.		Quantity.		Quantity.		Quantity.		Quantity.	
Receipts.		Receipts.		Receipts.		Receipts.		Receipts.		Receipts.		Receipts.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
...	...	...	...	6,978	17,261	...	...	10,416	22,698	1,302	2,833	137	452
10	51	1	2	...	...	...	...	84	3,019	12	377	1	3
...	...	5	20	...	...	...	...	994	11,339	124	1,417	...	...
2	10	...	...	...	...	...	...	4	25	2	...	...	...
...	...	...	...	142	1,093	2	24	159	3,107	23	338	...	...
996	4,044	2,529	5,554	5,913	2,473	3,763	4,947	41,411	58,288	5,176	7,286	38	141
1,760	10,073	208	2,006	10	114	17,903	1,68,060	56,939	8,10,113	7,117	1,01,264	60	331
1,682	10,535	1,070	6,257	8	8,549	770	8,850	43,667	7,64,310	5,453	85,539	574	3,532
23	213	100	355	59	833	57	511	1,003	18,174	126	2,272	17	124
569	3,796	486	2,013	3,798	21,274	235	2,068	15,523	1,47,659	1,940	18,457	19	88
23	112	3	15	348	2,217	2	14	560	4,689	70	587	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...
291	1,324	1,228	5,819	1,488	10,988	897	5,354	77,116	5,50,296	9,639	68,787	12	80
180	1,209	729	2,396	4,015	38,363	1,119	6,737	35,753	3,12,747	4,469	39,003	214	962
15,193	51,725	76,539	2,87,579	97,775	4,10,741	12,935	48,119	455,772	21,30,756	50,871	2,60,344	4,436	19,420
57	277	59	230	19	171	25	239	953	13,293	119	1,062	7	7
171	1,004	658	2,680	194	2,228	243	2,008	11,788	1,28,139	1,473	16,917	233	1,136
8	46	107	405	14	184	10	84	242	2,449	30	304	8	19
57	225	87	433	17	184	8	80	625	4,009	78	614	...	...
37	200	121	364	30	385	...	...	697	8,580	87	1,072	28	93
41	319	75	302	365	4,684	23	256	3,628	39,410	453	4,989	91	555
...	...	16	72	71	614	...	...	709	5,054	89	632	21	99
2,341	11,752	761	2,580	3,104	10,232	7,051	8,822	42,968	4,46,730	5,371	55,841	354	1,771
59	378	81	264	1,246	13,491	413	3,870	11,617	86,127	1,452	10,736	82	417
210	1,898	1	10	4	30	7	108	4,303	75,083	538	6,385	...	...
104	427	212	337	64	171	30	343	790	8,614	99	1,077	2	16
677	2,944	530	753	2,053	10,656	111	977	25,447	2,40,887	3,556	30,043	10	53
734	2,138	8,761	25,980	724	3,823	337	918	2,29,496	1,78,393	28,737	1,97,299	1,189	4,306
4,823	15,635	2	4	...	...	4	32	10,844	33,384	1,355	4,173	3	18
5,132	15,615	20,517	81,750	121	921	4,711	22,192	1,48,874	7,18,713	18,009	89,839	963	3,673
1	5	42	311	42	629	1	33	247	9,478	31	1,185	2	19
182	980	86	278	358	3,196	72	627	4,120	38,681	515	4,860	152	763
636	15	19	103	28,940	46,330	566	1,442	1,31,634	1,44,605	16,454	18,077	210	496
469	1,502	359	1,100	1,196	7,540	1,282	6,822	1,21,119	11,61,031	15,139	1,45,129	172	801
...	...	6	13	48	438	2	25	6,305	1,51,792	785	18,974	...	...
126	674	150	555	674	6,443	304	2,059	31,640	2,64,889	3,955	33,111	106	418
1,233	4,944	1,244	6,525	17,194	35,931	5,978	37,878	56,075	2,14,940	7,009	26,867	1,139	2,772
14	89	21	71	30	363	1.8	1,106	8,580	1,01,250	447	12,656	16	44
...	...	...	...	...	...	...	...	...	...	...	...	...	...
2,309	7,210	1,011	3,637	8,978	24,614	1,049	11,000	1,74,504	8,09,499	21,813	1,01,187	805	4,381
...	...	...	...	...	...	...	...	...	...	...	...	...	...
1,028	10,652	533	418	1	4	...	...	1,625	11,445	203	1,431	7	66
...	...	...	...	...	...	...	...	630	1,420	79	177	51	276
280	1,039	...	...	134	1,245	...	...	703	3,141	88	393	...	...
16	63	...	...	530	1,184	...	...	10,150	10,316	1,259	1,289	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
808	470	57,690	3,029	27,156	24,468	...	...	2,52,790	2,17,093	31,599	27,137	6,387	33,994
5,774	2,867	...	...	...	...	...	...	1,25,313	2,28,155	15,664	36,019	3,152	2,541
...	...	...	...	...	...	...	...	...	...	...	...	264	2,600

A. LEM.

REVENUE—TABLE K.

Statement showing the Unit Mileages of Passengers and Goods carried on the 9 Metre Gauge Railways during the year ending 31st December 1882.

RAILWAYS.	Miles open on 31st Decem-ber 1882.	Passenger Traffic.					Goods Traffic.							
		Number of Passenger miles (expressed in the number of Passengers carried one mile).					Number of Ton-miles (expressed in the number of Tons moved one mile).							
		First Class.	Second Class.	Third or Intermediate Class.	Fourth or Lowest Class.	Total.	Other Traffic Ton miles.	General Mercan-dize.	Military Stores.	Railway Material for con-struction.	Coal for the public Revenue (short only).	Revenue (short only).	Total.	
1 South Indian...	663	538,591	2,756,793	...	146,831,860	149,246,844	...	33,070,897	75,186	1,830,823	...	726,285,766,757	27,081	89,436,809
2 Rajputana-Malwa ...	1,115-55	1,659,360	4,018,944	4,092,045	292,036,571	301,876,922	1,500,637	11,735,967	611,972	4,789,945	323,763	8,869,629	1,228	130,807,716
3 Northern Bengal ...	230	546,355	1,011,617	1,452,394	29,100,801	32,111,766	223,257	18,048,331	36,856	236,150	559,151	884,946	...	21,104,014
4 Tirhoot ...	79	149,887	193,213	...	16,138,647	16,501,747	93,639	4,223,952	901	1,433,431	1,041,889	89,776	4,362	6,439,895
5 Cawnpore-Furruckabad ...	86-50	36,821	138,377	...	15,989,173	16,174,371	45,141	2,054,512	85,739	29,974	83,662	9,242	282,032	3,444,864
6 Nagore and Chhattisgarh ...	149	43,983	232,286	222,048	10,819,137	11,316,576	40,665	5,601,764	5,523	509,305	22,402	163,045	172,355	6,534,462
7 Rangoon and Irrawaddy Valley ...	161	172,391	637,722	...	49,184,443	49,894,558	97,139	14,107,106	48	211,678	14,977	122,362	2,665	14,923,488
8 Bhavnagar-Gondal ...	193	87,503	434,619	...	31,341,118	31,763,940	176,723	4,441,146	...	2,611,214	90,847	34,424	12,112	7,345,971
Total.....	2,677-05	3,233,893	9,023,171	15,766,487	590,911,772	608,663,323	2,238,042	106,165,837	815,723	11,727,729	2,138,617	11,029,947	289,745	230,436,309
Average of Nos. 1 to 8 for...	85-75	103,651	239,204	194,823	18,936,480	19,517,158	72,405	6,285,443	26,145	576,889	68,545	353,505	267,023	7,335,543
9 Mysore ...	85-75	152,357	263,836	...	10,625,855	11,042,066	47,352	733,237	578	417,672	...	2,322	18,932	1,269,023
Percentage of Total.....	...	1-38	2-39	...	96-23	100	3-73	9-36	0-5	32-91	...	18	7-61	100

A. LEM.

REVENUE—TABLE L.
Statement showing the Total Receipts and Expenses and the net Receipts per train mile on the 9 Metre Gauge Railways during the year ending 31st December 1882.

Railways.	Miles open on 31st Dec- ember 1882.	Coaching Receipts.		Goods Receipts.		Total traffic Receipts.		Miscellaneous including steam boat Etc.		Gross Receipts.		Working Expenses.		Net Receipts.	
		Rupies.	Per Passenger Train mile.	Rupies.	Per goods Train mile.	Rupies.	Per train mile.	Rupies.	Per Train mile.	Rupies.	Per Train mile.	Rupies.	Per Train mile.	Rupies.	Per Train mile.
1 South-Indian	663	21,14,967	3.82	15,94,462	1.82	37,09,429	2.60	49,280	0.03	37,58,715	2.63	23,56,386	1.65	14,02,329	0.98
2 Rajputa-Malwa	1,115.55	37,60,875	2.29	70,24,583	3.27	1,07,85,458	2.88	1,44,172	0.04	1,09,29,630	2.92	59,00,377	1.55	51,29,253	1.37
3 Northern-Bengal	230	5,70,693	2.53	12,59,266	3.18	18,00,959	2.01	3,35,951	0.55	21,45,910	3.49	10,52,357	1.71	10,93,553	1.78
4 Tirhoot	79	2,60,608	2.77	2,97,688	1.98	5,58,296	2.25	1,01,726	0.42	6,60,022	2.70	4,05,975	1.66	2,54,047	1.04
5 Oawnpore-Furruckabad	86.50	1,85,966	2.37	1,68,650	2.81	3,53,998	2.56	4,815	0.04	3,58,812	2.60	2,41,702	1.75	1,17,110	0.85
6 Nagpore and Chattisgarh	143	1,39,962	2.45	4,59,103	3.55	5,98,988	3.22	6,318	0.03	6,04,886	3.25	4,15,215	2.62	1,89,571	1.02
7 Rangoon and Irrawaddy Valley	161	5,16,930	3.51	7,58,515	2.88	15,52,215	3.18	2,347	0.05	15,75,691	3.23	9,45,360	1.94	6,30,331	1.39
8 Bhavnagar-Gandhi	193	4,63,576	3.39	3,98,035	2.57	8,62,511	2.65	14,225	0.04	8,76,836	2.99	5,23,189	1.79	3,53,647	1.21
Total.....	2,877.05	83,11,077	2.79	1,19,10,983	2.86	2,02,30,132	2.44	6,79,840	0.09	2,09,10,502	2.83	1,17,39,461	1.65	91,70,541	1.28
Average of Nos. 1 to 8 for	85.75	2,66,380	2.79	3,83,022	2.16	6,43,433	2.54	2,760	0.03	6,70,192	2.93	3,75,265	1.65	2,95,927	1.28
9 Mysore ...	85.75	1,92,553	3.66	62,415	1.90	2,55,973	2.81	2,717	0.03	2,88,890	2.84	1,84,895	1.82	1,03,995	1.02
Percentage of Total.....		66.77		32.18		38.25		1.05		100		64.11		35.89	

Average Train Miles—2,28,651. Mysore Train Miles—1,01,479.

A. L. M.

REVENUE—TABLE M.
Table showing Expenditure on Revenue Account on 9 Metre Gauge Railways during the year ending 31st December 1882.

Railways.	Miles open on 31st December 1882.	Maintenance of Way Works and Stations.		Locomotive.		Carriage and Wagon.		Traffic.		General.		Steam boat.		Special and Miscellaneous.		Total.	
		Amount.	Per train mile.	Amount.	Per train mile.	Amount.	Per train mile.	Amount.	Per train mile.	Amount.	Per train mile.	Amount.	Per train mile.	Amount.	Per train mile.	Amount.	Per train mile.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
South Indian ...	683	6,56,556	0.46	8,02,737	0.58	2,98,748	0.17	3,93,381	0.24	3,08,488	0.21	...	...	13,451	0.01	23,56,336	1.65
Rajputana-Malwa ...	1115.53	12,75,233	0.34	11,67,255	0.63	3,94,513	0.11	8,55,536	0.23	6,18,536	0.17	...	...	1,00,898	0.03	55,00,377	1.55
Northern Bengal ...	230	2,24,404	0.36	3,08,458	0.50	50,639	0.08	1,57,104	0.28	1,77,572	0.29	1,14,475	0.19	19,707	0.03	10,52,357	1.71
Tirhoot ...	79	74,519	0.31	1,12,255	0.46	25,409	0.10	68,994	0.28	57,273	0.23	64,883	0.27	2,652	0.01	4,05,975	1.66
Cawnpore-Purathabad ...	85.50	52,214	0.38	64,468	0.47	7,131	0.05	40,451	0.29	73,976	0.56	...	...	459	...	2,41,702	1.75
Nagpore-Chhattisgarh ...	149	1,12,457	0.60	1,28,487	0.68	44,226	0.24	71,973	0.39	58,826	0.31	...	...	1,246	0.01	4,15,215	2.23
Amgon and Irrawaddy ...	161	2,51,896	0.52	2,64,438	0.54	47,608	0.10	2,45,896	0.50	1,19,861	0.25	...	...	15,561	0.00	9,47,599	1.94
Bharuagar-Gondal ...	193	1,27,383	0.44	1,44,804	0.49	30,685	0.10	1,01,735	0.54	1,14,639	0.58	...	...	2,916	0.01	5,22,189	1.79
Total.....	2877.05	27,74,887	0.39	32,73,298	0.61	8,38,985	0.12	18,80,268	0.26	15,30,165	0.21	1,79,308	0.03	1,56,790	0.03	1,17,39,461	1.65
Average of Nos. 1 to 8 for ...	85.75	88,832	0.39	1,40,332	0.61	25,890	0.12	60,265	0.26	49,044	0.21	5,747	0.03	5,025	0.03	3,76,265	1.65
Mysore ...	85.75	34,851	0.04	73,586	0.73	9,501	0.09	30,131	0.23	33,781	0.38	...	...	2,640	0.03	1,81,835	1.52
Percentage of Total.....	...	18.83	...	40.02	...	5.14	...	16.29	...	18.27	...	...	...	1.43	...	100	...